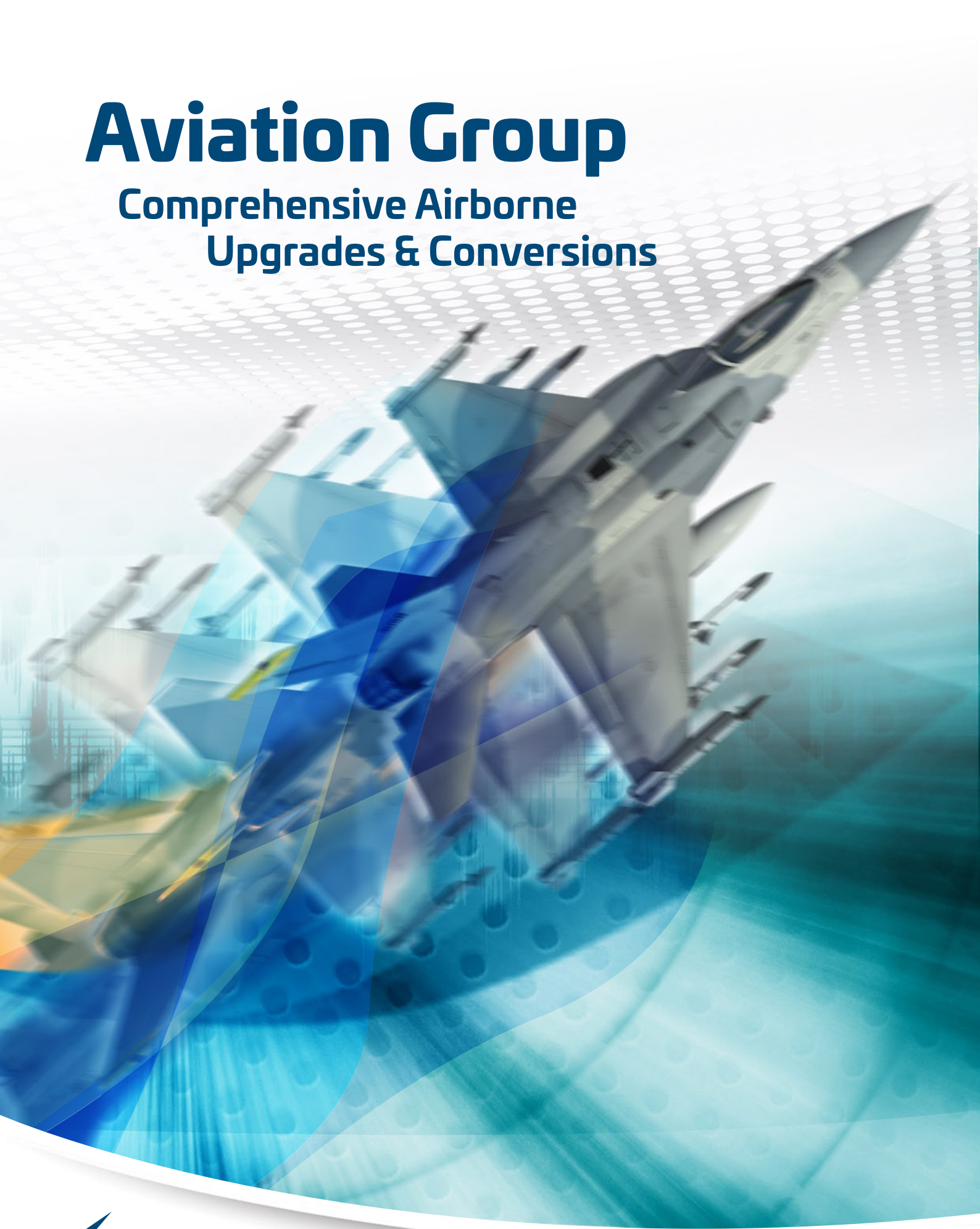
Aviation Group

Comprehensive Airborne Upgrades & Conversions



IAI

Where Courage Meets Technology™

IAI Aviation Group

IAI is a world leader in the defense and commercial markets, delivering state-of-the-art technologies and systems in all domains: air, space, land, naval, cyber, homeland security and ISR.

IAI's Aviation Group, one of four business groups, draws on over 50 years' experience and expertise, and combines IAI's military and commercial aviation capabilities, to provide optimized solutions to meet our customer's specific needs.

IAI's Aviation Group is involved in all aspects of the Aviation industry, including:

- Upgrades of Military Aircraft and Helicopters
- We offer an entire range of metal and composite aerostructures for military and commercial platforms
- Aircraft design, development, manufacture, testing, certification, and building midsize business jets
- World leader in Passenger to Cargo Conversions
- Provider of Comprehensive Maintenance, Repair and Overhaul (MRO) services for Aircraft (base & line maintenance), Components, Engines and Engine Lease, Trade and Exchange

Military upgrades and conversions

IAI's Aviation Group has accumulated vast experience performing military aircraft and helicopter structural and avionics upgrades. IAI's cost-effective upgrade solutions provide platforms with enhanced operational performance and extended service life.

IAI's Aviation Group military aircraft programs include:

- Avionics and structural upgrade of fighter aircraft to extend service life and enhance mission operational capabilities
- Tailored helicopter avionics and mission systems
- Advanced Training Systems including Flight Simulators, Virtual Training Systems and Flight Debriefing Ground Aids
- Military transport aircraft life extension, modification and upgrade
- Advanced real-time airborne networks & avionics solutions
- IAI Kfir fighter aircraft upgraded with 4th generation avionics and new weapon systems
- Special Missions, Air Refueling Tankers aircraft conversions

taking your platf

form to the max

Aircraft

IAI's Conversions & Upgrades Division has comprehensive, in-house capabilities for performing upgrade programs including avionics modification and cockpit reconfiguration as well as maintenance, overhauls and repairs for military aircraft.

IAI's Conversions & Upgrades Division has extensive experience having upgraded over 2,500 aircraft and helicopters. Such comprehensive experience provides the ability to tailor upgrade packages to each customer's specific needs and requirements.

IAI's highly skilled, multi-disciplinary teams of pilots, engineers, managers and technicians successfully implement complex upgrade programs. These programs typically include: design, development and integration of advanced state of the art systems and software together with verification, qualification and certification by analysis, ground testing and flight testing.

IAI has developed many systems to support and enhance the successful mission performance of upgraded aircraft . These systems enable pilots to have optimized display of data and easy system control for operational use as well as for training.

Helicopters

The Conversions & Upgrades Division has overhauled and upgraded thousands of helicopters for both the Israel Air Force and customers from around the world. IAI's state-of-the-art upgrade solutions significantly enhance helicopter operational capabilities, providing customers with operational performance comparable with new helicopters. Upgrading helicopters is a cost-effective alternative to purchasing extremely costly, new helicopters.

The Conversions & Upgrades Division upgrade packages incorporate advanced avionics, sensors, weapons and self-defense systems, which are tailored to the exact requirements of each specific Customer. By drawing on the experience of our team of ex-Israeli Air Force pilots, IAI's helicopter upgrades are optimized to meet the real demands of current operations.

The Conversions & Upgrades Division also provides helicopter maintenance, overhaul and refurbishment services. IAI is authorized by Bell and other helicopter OEMs to perform maintenance and repairs.

Transport

The Conversions & Upgrades Division is a World Class aerospace Maintenance, Repair & Overhaul (MRO) and house of conversions for military and commercial transport aircraft, with high quality products, that are approved and licensed by a wide range of civil aviation authorities including the CAAI, FAA, EASA and others. IAI's Aviation Group, is the Israeli Air Force official MRO and complete support center, with over 160 C-130 PDM's and other modifications, IAI provides total maintenance services, Conversion to Aerial Refueling Tankers, Engines (T56-15A) overhaul (T56-15A) & components, alongside various transport aircraft platform upgrades and conversions.

The Conversions & Upgrades Division MRO center is highly experienced in Center Wing Box (CWB) replacement as part of the C-130 Life Extension and has performed it for the Israeli Air Force (IAF) C-130H Fleet.

In addition, the Conversions & Upgrades Division draws on its experience in Air-to-Air Refueling and Cargo Conversion to develop and convert a Multi Mission Tanker Transport configuration aircraft based on the B767 platform. The aircraft is configured simultaneously for air refueling, cargo, VIP, passengers and ISR systems as desired by the operator.

Net-Centric Warfare Solutions

The Conversions & Upgrades Division Operational Avionics Layer (OPAL) solution enables air, land and naval forces to establish a highly scalable, robust and real-time distributed networking cloud. OPAL enables manned and unmanned platforms, to share real-time data and generate operational insights for an effective and safer joint mission performance with efficient mission control and management.

OPAL serves as the infrastructure for networking connectivity, data sharing and operative actions. Using OPAL enables different entities to create a common operating picture with enhanced situational awareness as well as advanced application-based situation management.

OPAL is a software-oriented, open-architecture solution, providing low lifecycle cost with a simple introduction of new capabilities. OPAL is delivered in a variety of form factors for optimized utilization in different platforms.

B767 MMTT

Multi-Mission Tanker Transport

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B767

Multi-Mission Tanker Transport (MMTT)

Tanker Configurations

- One-Point Flying Boom
- Two-Point Hose & Drogue
- Three-Point Hose & Drogue
- Three-Point Boom and Hose & Drogue
- Four-Point Boom and Hose & Drogue

MMTT Highlights

- Conversion of Pre-Owned B767 A/C
- Outstanding Performance
- High-Dispatch Reliability
- Multiple Solutions and Capabilities
- Enhanced Mission Flexibility
- Best Value for Money
- Built-in IAF Operational Experience
- Total Maintenance, Engineering & Logistics Support

Advanced Mission Equipment

- Fly-by-Wire (FBW) Boom
- Improved AAR Pods & HDU
- 3D Viewing System (day & night, IR sensitive)
- Remote Aerial Refueling Operator (RARO) Station
- Upgraded GATM Compliant & Military Avionics

Medical Evacuation (Medevac)

"Smart Tanker" - MMTT + C4I, ISR,Communication Network

Air-to-Air Refueling

Boom Operator Station

Cargo Transport

Pax/Troops Transport

VIP Transport

Design & Manufacture of Air Refueling Pods

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IAI C-130

For All Your Requirements

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C-130

Maintenance, Upgrade, Converssion & Life Extension

IAI's one stop C-130 Center provides maintenance, repair and overhaul of airframes, engines and components.
IAI also performs C-130 modifications, upgrades and conversions.
For the past 40 years IAI has been providing the Israel Air Force with all its C-130 maintenance and support requirements.

Maintenance, Repair and Overhaul

- Line and Heavy Maintenance
- Overhaul of Engines & Components
- After Crash Repairs

Upgrade – IAI specializes in tailoring new avionics and mission packages to meet the future C-130 operational requirements

- Modernization and Upgrade for Enhanced Performance
- Night Missions
- Long Distance Missions
- High Altitude Missions
- Replacement of Obsolete Systems

Life Extension

- Replacement of Center Wing Box (CWB)
- Wiring Replacement

Conversion

- Aerial Refueling Tanker Conversion
- Special Missions: SIGINT, COMINT
- Maritime Patrol
- Special Forces Transportation
- Search And Rescue (SAR)

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KFIR

Multi-Role Fighter Aircraft

for Advanced 4th Generation Fighter Capabilities

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KFIR

Multi-Role Fighter Aircraft

for Advanced 4th Generation Fighter Capabilities

Key Characteristics

- Supersonic MACH 2+ with excellent maneuverability
- All weather, beyond visual range (BVR) air-to-air and air-to-ground mission capabilities with glass cockpit and helmet mounted display
- State-of-the-art avionics, with AESA radar, datalink, RWR and integration of advanced smart weapon systems
- Aerial refueling capability
- 9 external stations for weapons & fuel tanks with 5.5 ton external payload capacity

Benefits

- High reliability with easy maintenance
- Growth potential and ability to tailor capabilities to the user's specific requirements
- Low procurement cost
- Low life cycle costs
- Guaranteed long-term comprehensive support

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AFFORDABLE UPGRADED MULTI-ROLE UH-60

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AFFORDABLE UPGRADED MULTI-ROLE UH-60

Refurbished UH-60 Blackhawk helicopter upgraded with IAI's advanced avionics, systems & sensors

- Best medium lift helicopter in its class
- Multi-role: Versatile capabilities for Utility and Attack Missions
- Long service life with full support
- Cost effective

Avionics Upgrade tailored to specific user requirements

- Modular and scalable package for future adaptations
- Glass cockpit with HMD, reduced crew workload and enhanced situational awareness
- Enhanced navigation systems
- High performance mission EO payload
- Weapons
- Self-protection/EW systems

Helicopter design for demanding military requirements

- Performance
  - Exceptional hot/high performance
  - High useful payload for optimized mission performance
  - High reliability (MTBF)
- Survivability
  - Fully redundant, no single point of failure
  - Rugged & durable systems
  - Hard landing tolerant
  - Ballistic tolerant
- Maintainability
  - Independent field operation
  - Easy access to key systems
  - Simple disassembly/reassembly
  - Airframe without calendar life limit
  - Low life cycle cost

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SKIMMER

NAVAL HELICOPTER PACKAGE

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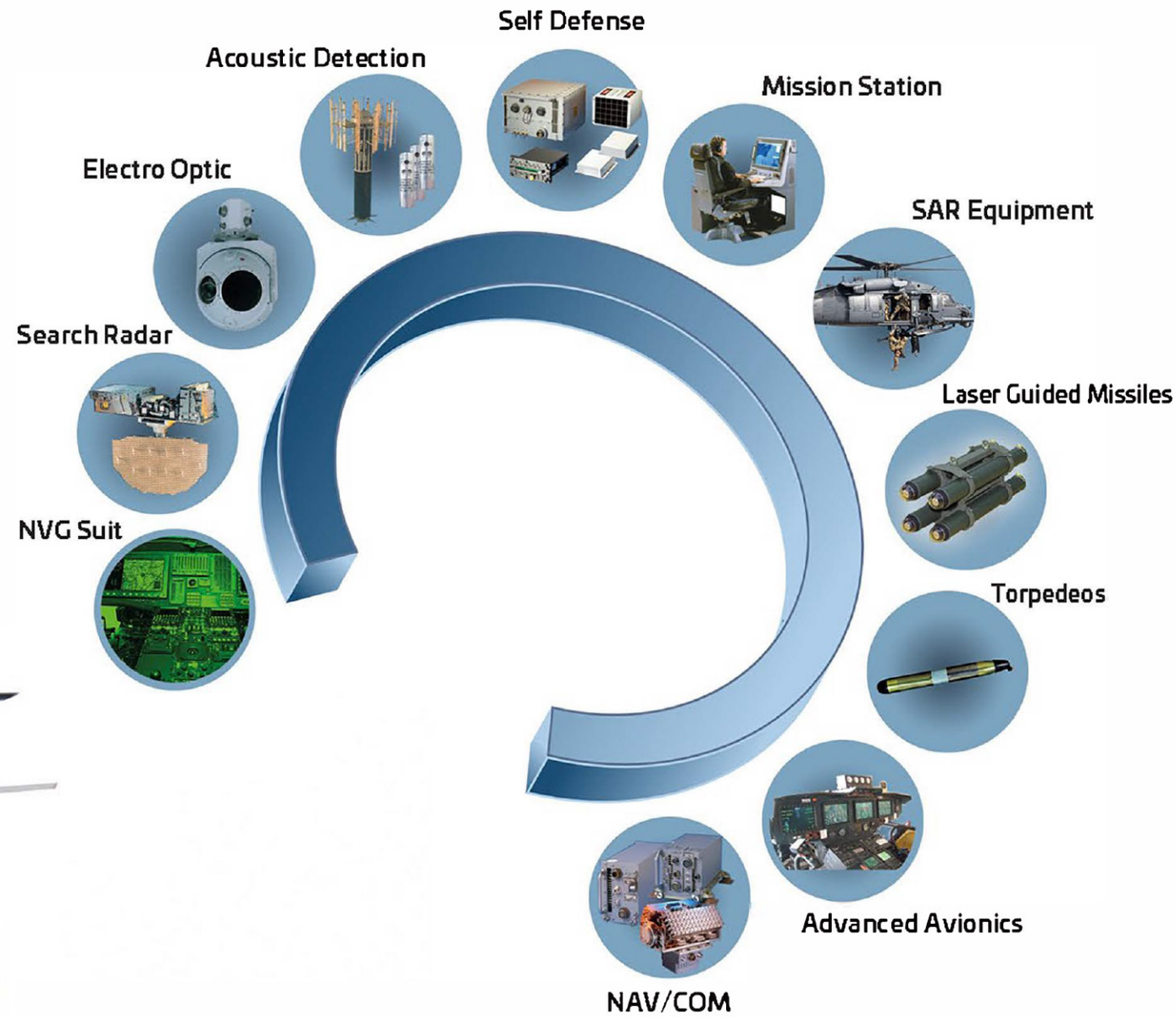
SKIMMER

NAVAL HELICOPTER PACKAGE

Integration of Mission Equipment (Include on-board sensors)

- Maritime Surveillance Radar (ELM-2022)
- Dipping Sonar and Sonobuoy Processing System (FLASH)
- Electro Optic Payload
- EW (ESM, Missile Warning)
- Mission Management and Monitoring Station
- Weapons (ASM, Rockets and Guided Missiles)
- Advanced Avionics
- Navigation and Communication (AIS, DF, IFF, Satcom, Datalink)

IAI draws on its vast experience with mission sensors, system integration & operations to offer the cost-effective, modular SKIMMER Naval Helicopter Package



Typical Naval Missions

- ASW - Anti Submarine Warfare
  - Detection by Radar, EO payload and acoustic systems
  - Attack using missiles and torpedoes
- ASuW - Anti Surface Warfare
  - Detection by Radar and EO payload
  - Attack using Rockets and Missiles
- Coastguard Protection
- Special Operations
- Search and Rescue
- Full mission performance in day, night and extreme weather conditions

Tactical Situation Display

Integration of Naval Helicopter Mission Systems

Israel Aerospace Industries IAI, is a world leader in the design, development, adaptation and integration of the entire range of missions systems for all types of aircraft and helicopters. IAI has the capabilities to tailor optimized solutions to meet today's and tomorrow's naval mission requirements.

IAI utilizes the operational experience of our team of military helicopter pilots to optimize the SKIMMER Naval Helicopter Package for Anti Submarine Warfare (ASW), Anti Surface Warfare (ASuW), Coastguard Protection, Special Operations, and Search and Rescue (SAR) mission requirements.

IAI's experts have proven experience successfully integrating advanced mission equipment manufactured by IAI and other manufacturers on numerous types of helicopter platforms.

The unique, cost-effective SKIMMER naval helicopter package is designed to be tailored to different helicopter models and sizes. The SKIMMER naval helicopter package can be adapted to the customer's specific requirements, and easily integrated on new or existing helicopter platforms.

IAI's Pilot Training Academy Package

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Military Pilot Training Academies

Future Pilot Skills

- Function under pressure in fast changing combat environment
- Multi-tasking with ability to integrate data from multiple sources
- Full familiarity with technologies and entities in operational scenarios for effective decision making

Resources

- Academic concept based on combat experience, and proven systems
- Advanced pilot training tools and technologies
- Step by step, comprehensive flight training build-up

IAI's Military Pilot Training Academy Package

Knowledge

Optimized tailored solutions based on years of pilot training experience driven by the evolving military pilot operational missions

- Advanced screening systems and methodology for pilot selection
- Basic and advanced training with combination of ground school, ground training systems and flight school
- Development of tactical capabilities
- Solutions for fighter, rotary wing and transport pilot training

Aircraft

Cost-effective platform to meet pilot training requirements

- Turboprop aircraft with avionics to provide the environment for developing basic flight skills and proficiency

or/and

- Jet trainer aircraft with advanced avionics and systems that replicate advanced fighter aircraft sensors and displays for advanced pilot training

Technology

Unique, advanced and field-tested technology operational on advanced trainer aircraft

- Live Virtual Constructive (LVC) with real-time simulated training
  - -4th and 5th generation cockpits
  - -Avionics and sensors (Radar, RWR, IRST, Targeting Pods, etc.)
  - -Air-to-Air and Ground-to-Air threats
- Embedded anti-collision warning system (operational on the Israel Air Force aircraft)
- Unique debriefing system (with virtual reality)

Operations & Customer Logistics Support

Full life cycle support for military pilot training academies

- Trainer aircraft operations and maintenance
- Ground-based training devices (cockpit procedures trainer, operation flight trainer, full mission simulators, etc.)
- Syllabus for each pilot training phase
- Infrastructure for managing training activities and data

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HELICOPTER COMPONENTS BUSINESS LINE

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HELICOPTER COMPONENTS BUSINESS LINE

Mainly for Military Customers

IAI's Aviation Group is well known as an industry leader in helicopter dynamic components and blades maintenance.

Operating as a maintenance center for the Israeli Air Force and supporting other forces worldwide.

IAI's Aviation Group Maintains the Following Systems:

- Testing, Repair and Overhaul of Helicopter Dynamic Components:
  - Gearboxes and Transmissions
  - Shafts
  - Mast
  - Clutch Assy
  - Swashplate

- Repair and Overhaul of Helicopter Main and Tail Rotor Blades, including:
  - Static Balancing
  - Non Destructive Testing
  - Whirl Tower Dynamic Balancing (in one of the few devices available in the world)

IAI's Aviation Group Maintains the Following Systems:

- Bell: -204/-205/-206/-206L/-212/-412, AH-1/-209, OH-58A/C/D, UH-1H/-1N
- Boeing: AH-64
- Sikorsky: CH-53/S-65, UH-60/S-70

Advantages:

- Top Quality Reliability
- T.A.T to Meet Customer Requirements
- Lowest Maintenance Cost
- Superior Customer Service
- Dedicated Program Manager
- Professional Engineering Solutions for Complex Defaults

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IADS

Integrated Avionics Display System

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IADS

Integrated Avionics Display System

For Maximized Helicopter Missions Performance

- Full Glass Cockpit
  - Flight and Navigation System
  - Integration to Various Mission Systems
  - Advanced Weapon Systems
  - Full redundancy
  - Planning and Debriefing System
  - Health Usage and Monitoring System
- Proven and fully operational on hundreds of platforms
- Optimized and cost effective solution

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OPAL

Interoperable. Independent. Agile.

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OPAL

Decentralized Battle Management Cloud

OPAL provides seamless real-time interoperability between diverse, multiple air, land and sea platforms and forces. OPAL generates a comprehensive and dynamic common battle picture to maximize efficiency and survivability among network participants.

Connect

- Real-time, self-forming & self-healing network
- Robust & jam resistant
- Highly scalable to support hundreds of entities

Share

- Generic infrastructure supports multiple applications
- Secure data, voice and video sharing
- Realtime Common Operating Picture

Act

- Optimized mission allocation
- Collaborative targeting & threat sharing
- Real-time Collision Avoidance

Increase operational efficiency & lethality

- Enhanced mission performance
- Enabling interoperability among different forces/platforms
- Optimized resource utilization

Improve survivability & mission safety

- Reduced exposure time
- Enhanced identification of friend/foe
- Improved in-flight safety

Save time & money

- Minimized implementation time & costs
- Effective training via Virtual/Augmented Reality
- Flexible SDR, datalink and C2 selection

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New Generation Up Front Control - UFC NG

Expand F-15 Cockpit Display & Control capabilities

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OPERATIONAL F-15
UFC NG - Up Front Control New Generation

Up Front Control Panel & Multi-Function Display combined into a single unit for enhanced pilot mission performance:

- Operational on the Israel Air Force F-15 A/B/C/D aircraft
- Over 5 years proven performance
- Optimal location in cockpit for maximized pilot visibility and ease of control

Unique benefits of the UFC NG:

- UFC-NG Inputs: 2 videos, 4 audios, MIL-1553B, ARINC-429, ETHERNET, Serial, etc.
- Ability to overlay data from different sources to generate a tactical display with moving map, Radar data, Targeting Pod data, other real-time data from sensors and pre-programmed data
- Control and monitoring of aircraft systems such as: NAV, COMM, IFF, Data Link

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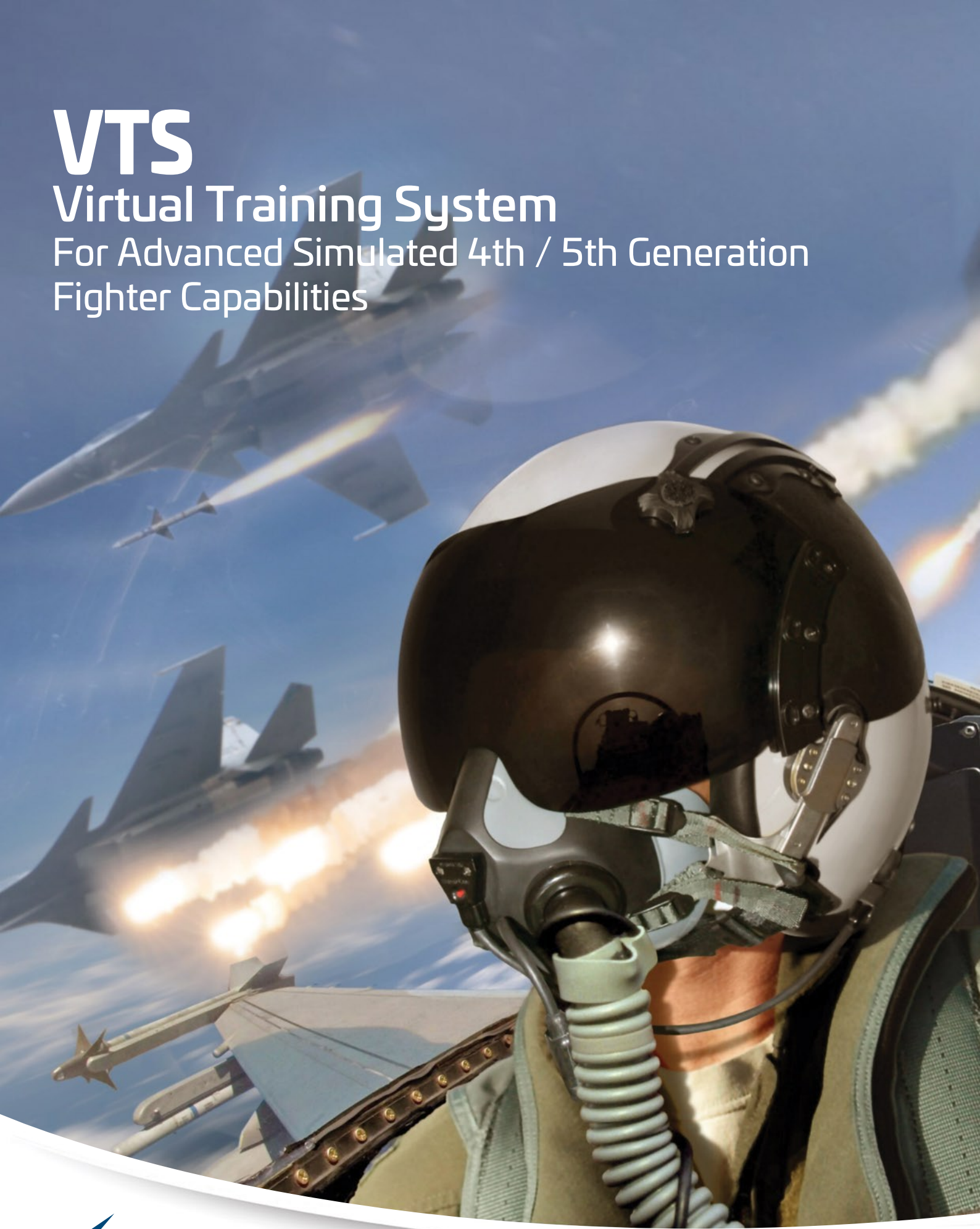
VTS

Virtual Training System

For Advanced Simulated 4th / 5th Generation Fighter Capabilities



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VTS
Virtual Training System

System Benefits:
- Increased scope of pilot training
- Improved training effectiveness with real-time network
- Enhanced safety with Collision Avoidance Warning System and Real-Time Ground Station

Capabilities:
- Replicates fighter cockpit displays, mission systems, and sensors
- Advanced pilot training tailored to specific fighter aircraft
- Air-to-Air training with virtual Radar and sensors
- Virtual RWR A/A and A/G threats
- Simulated weapon deployment

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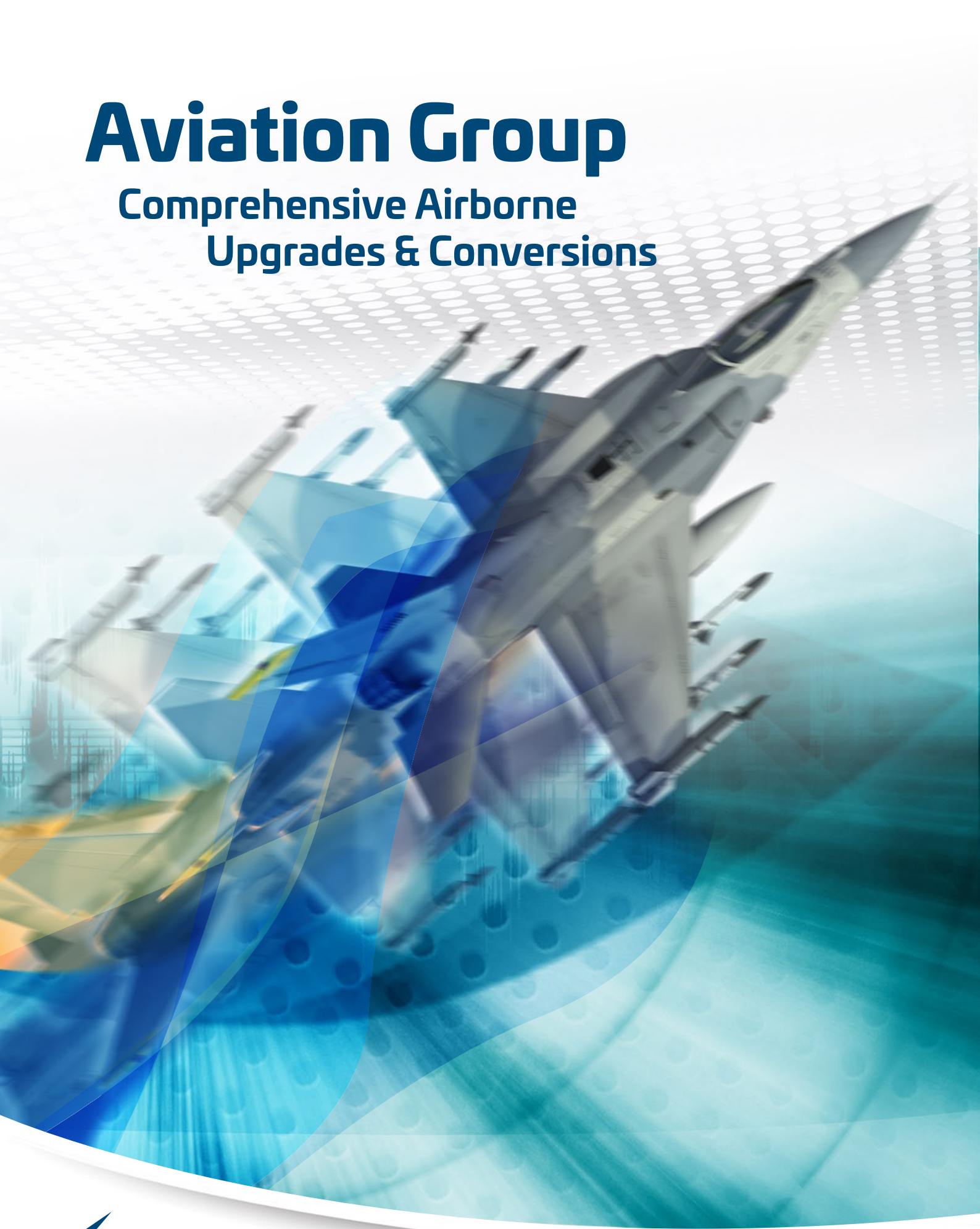
Comprehensive Airborne Upgrades & Conversions



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